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QUESTIONS ON GONORRHEA

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FEDERAL SECURITY AGENCY
U. S. PUBLIC HEALTH SERVICE

20 QUESTIONS ON GONORRHEA

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QUESTION

INTRODUCTION

Gonorrhea—a disease with which two million persons in the United States are infected . . . a disease which is painful and dangerous to the individual concerned . . . a disease which is highly communicable—presents a problem to all the people.

Syphilis—though a different disease and because of its end results a more deadly one—is a similar public health problem. Yet syphilis is retreating before a determined attack.

Education has played a major role in the campaign against syphilis. Today people know that closing one's eyes to a danger does not remove the danger. They know the quack has no answer. They know that only prompt and competent treatment can cure syphilis.

The question is: Can we apply the same tactics against gonorrhea? True, we are not able to state treatment procedures for gonorrhea as definitely as for syphilis. But progress is being made. And experience in the syphilis campaign indicates that emphasis on the facts through active public education will materially aid control efforts.

"20 Questions on Gonorrhea" presents such basic information. It is written in layman's language for his use and for the use of the physician who wants to know how to tell the story of gonorrhea in nontechnical terms. The booklet has been prepared by the United States Public Health Service in cooperation with the American Neisserian Medical Society, the professional organization of specialists in gonorrhea.

20 QUESTIONS ON GONORRHEA

What is gonorrhea?

Gonorrhea is a dangerous, contagious, often very painful disease. It is known by many other names, including "clap," "gleet," "strain," and "dose."

The mucous membrane or lining of the urinary and genital organs and passages becomes inflamed and a discharge of pus forms. Although it is a local inflammation similar to catarrh, gonorrhea is by no means a simple disease. The infection finds its way into folds and crannies of the tissues where drainage is slow and treatment difficult. Gonorrhea is far more serious than the "common cold."

Gonorrhea and syphilis are two different diseases. Gonorrhea does not turn into syphilis nor does syphilis turn into gonorrhea. Both diseases, however, may occur in the same person at the same time. Gonorrhea does not come from strain or heavy lifting.

2 What is the cause of gonorrhea?

The direct cause of gonorrhea is a germ called the gonococcus. Under the microscope the gonococci usually appear in pairs resembling the two halves of a

coffee bean. This germ is found in the discharges from the human tissues it infects. The gonococcus is found only in human beings. It occurs nowhere else. So far it has been found impossible to transmit the disease to any of the lower animals. This means researchers do not have the advantage of conducting experiments on animals.

Outside of the body, the gonococcus is easily killed. It dies almost instantly upon becoming dry. The delicate nature of the germ makes accidental infection by indirect means extremely unlikely. In the hidden moist tissues of the body, however, it is very difficult to overcome. In the moist discharge, the gonococcus retains its infecting possibilities so long as it is moist.

3 Who gets gonorrhea?

More people suffer from gonorrhea than from any other serious disease. It recognizes no boundaries—economic, racial, geographic, or social. Each year in the United States there are over one million new cases of gonorrhea—twice as many as new cases of syphilis; three times as many as tuberculosis; four times as many as scarlet fever; and 130 times as many as smallpox.

GONORRHEA RECOGNIZES NO BOUNDARI



In addition to the new or acute cases of gonorrhea, it is estimated that another half million cases of chronic gonorrhea each year receive medical attention for the first time.

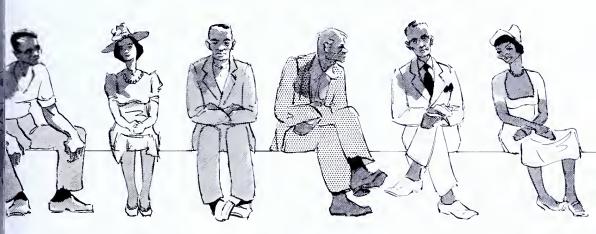
Available statistics seem to indicate from two to four times as much gonorrheal infection among men as among women. Much of this apparent difference probably is the result of greater neglect in seeking treatment among women than among men.

4 How is gonorrhea contracted?

In adults gonorrhea is practically always contracted through sexual relations with one having the disease. There have been apparently authentic cases in which the disease was transmitted to the susceptible tissues from moist pus left on toilet seats, from the use of borrowed douche nozzles, and the like. These cases seem to be medical curiosities, however. As a measurable source of gonorrhea, accidental infection can be disregarded.

Girl babies who develop the disease are infected usually by sleeping in the same bed with infected persons or through the carelessness of mothers or nurses

NOMIC, RACIAL, GEOGRAPHIC, OR SOCIAL



who either have the disease or are caring for others who have it.

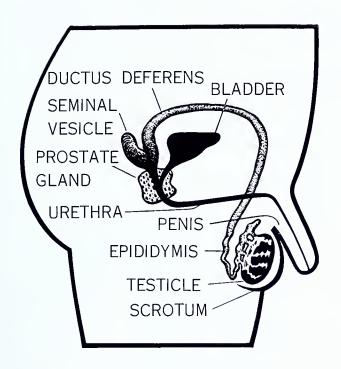
Gonococcal infection of the eyes in infants (ophthal-mia neonatorum) is contracted during passage of the infant through the birth canal of a mother having gonorrhea. The infection can be prevented by a drop of silver nitrate placed in the eyes of the baby immediately after birth. Most States require such treatment by law. Several decades ago this condition accounted for about 28 percent of the blindness of children. Today, gonorrheal blindness in infants is a rarity. This is an outstanding example of preventive medicine by public health control.

5 How does gonorrhea affect men?

In men and boys of all ages, accidental infection is very rare, if, indeed, it ever takes place. The infection starts in the front part of the urethra, the canal leading from the bladder to the outside. Early, competent treatment at this time will often cure the infection before it spreads into more remote regions of the body.

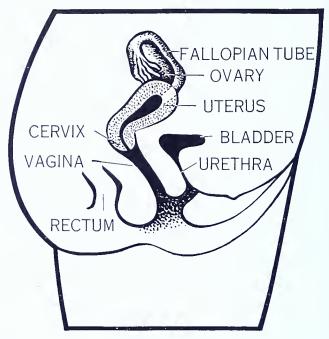
If treatment is neglected or poorly given, or if the individual fails to carry out the instructions of his physician, the infection passes further back into the urethra. Here it spreads to the prostate gland, the gland that surrounds the top of the urethra in men, and to the base of the bladder.

Gonorrhea in men largely affects the urinary system. However, in poorly behaved patients, the infection may pass into the genital system, passing into the structures near the testicles, where it causes great swelling and

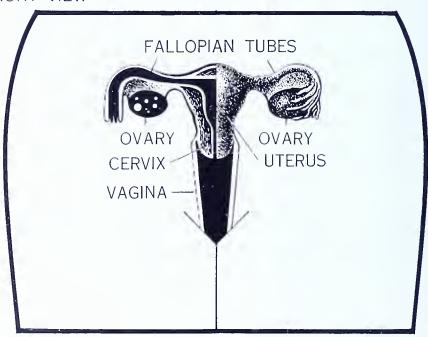


SCHEMATIC CROSS-SECTION DRAWING OF MALE REPRODUCTIVE ORGANS

SIDE VIEW



FRONT VIEW



SCHEMATIC CROSS-SECTION DRAWING OF FEMALE REPRODUCTIVE ORGANS

pain. Frequently the infection blocks the tubes through which the sperm cells pass. If both tubes are involved, the patient nearly always becomes permanently sterile.

6 How does gonorrhea affect women?

In women the story is quite different. The genital rather than the urinary structures bear the brunt of the infection. The urethra will probably become infected but in most cases it is readily cured.

The vagina, or the canal connecting the uterus (womb) with the outside, escapes infection since it is lined with a type of tissue that resists the gonococcus. The cervix, the neck of the uterus, however, is quite vulnerable and frequently the infection finds its way into the fallopian tubes, which carry the ova from the ovaries to the uterus. When this occurs on both sides, the patient is usually permanently unable to bear children.

Both in men and in women the surfaces of the internal sex organs have many tiny channels from which small glands empty their secretions. The gonorrheal infection often extends into these channels and, because of their poor drainage possibilities, they are very difficult to treat. Abscesses frequently form.

How long does it take to develop?

The usual period elapsing between the acquisition of the infection and the development of symptoms (the incubation period) is from 3 to 5 days. Sometimes the disease starts in such a mild form that the individual

is not aware of its presence. Indulgence in either sexual intercourse or alcohol at this time will tend to intensify the disease so that pronounced symptoms develop. In other words, the disease already present in a mild form is artificially stirred into activity. Occasionally, the incubation period may extend for as long as 2 weeks.

What are the symptoms in men?

The first symptom in men is a feeling of itching and irritation in the urethra. Usually there is a burning sensation during the passing of urine. A few hours later a discharge of pus will begin. Alcohol and sexual excitement tend to exaggerate the symptoms. Usually the discomfort is slight, although considerable pain may be present. There may be swelling at the outer end of the urethra.

9 What are the symptoms in women?

In women the symptoms are not so easily recognizable. Usually, however, there is some discomfort and burning in the urethra. There is a feeling of heat and soreness at the outlet of the vagina and a discharge of pus. This pus may be quite irritating and cause discomfort and redness of the surrounding skin surfaces. In other cases the flow of pus may be so small as to pass unnoticed.

Any discharge from the vagina is cause for suspicion. The rather common condition of leukorrhea or "the whites" may really be gonorrhea.

In a short time this acute period of gonorrhea usually subsides. The disease in most instances will continue to infect the more hidden sex organs. It frequently passes into the fallopian tubes where it causes considerable pain in the lower abdominal region. Gonorrhea may also cause fever.

10 Who should treat gonorrhea?

At best gonorrhea is difficult to treat. Only a competent physician is able to give satisfactory treatment. The quack doctor, and the drug clerk who counter prescribes, only want your money. They are not interested in your health. Self-treatment in gonorrhea is unsatisfactory. The best assurance of quick and complete cure is to go under the care of a physician at the first symptom of gonorrhea.

Quack doctors and home remedies never cure gonorrhea



How does the physician diagnose gonorrhea?

The most certain diagnosis of gonorrhea is to find the gonococcus in the discharge from the infected patient. The physician simply smears a microscope slide with the discharge. The slide is then stained so that the gonococcus will become visible, and then the doctor looks for it through a microscope.

Frequently, especially in chronic cases, no sign of the gonococcus can be found, so that the physician must depend upon other methods for diagnosis, such as growing the germs in a test tube. Flakes and shreds of pus (and occasionally blood) will show in the urine.

12 What are the chances for cure?

Under proper care gonorrhea can be cured in nearly every instance. It is usually easier to do this in men than in women, but there is little real basis for the pessimism which many people still have regarding cure of gonorrhea.

13 How do we recover from gonorrhea?

We recover from smallpox, typhoid fever, pneumonia, and a host of other diseases, not because the physician has a sure cure that turns the trick, but because the body itself is able to build up certain substances that overcome the disease. The physician acts as a watchman or guide instead of an all-powerful giver of curative drugs.

To a great extent this is the story for gonorrhea. A competent physician can shorten the attack and pre-

vent many of the complications, yet it is the patient himself who really produces the cure. His body manufactures the curative substances which gradually eradicate the infection.

In no disease, however, is it easier to retard or prevent the curative efforts of the body. The patient with gonorrhea must give up alcohol and sexual excitement. He simply fails to get well as long as he indulges in either of them. Rest and quiet is perhaps the best aid in treatment.

14 What are the facts about treatment?

"Take it easy" is the most important treatment principle for both patient and physician to remember in treating gonorrhea. Rest and quiet permits the body to build up necessary resistance against the disease. In addition, it helps prevent the infection from spreading to other sections of the body.

The following list of rules for the patient will enable treatment to progress swiftly and complications to be prevented:

Go to the doctor at once upon the first symptoms of gonorrhea. Follow his advice faithfully. Cure is usually possible with early treatment. Delay is dangerous.

Avoid sexual excitement. Do not have sexual intercourse while infected or while under treatment. It is dangerous for the patient. It makes the disease last longer and harder to cure. Gonorrhea is dangerous for the other party. It is an extremely infectious disease.

- Avoid alcohol in any form, including beer. Alcohol increases the discharge and makes the infection worse. Drink plenty of water.
- Rest as much as possible. Exercise as little as possible. Avoid constipation. Keep your bowels open.
- Do not wear a dressing over the urethra or vagina that prevents the free drainage of pus. It makes the infection worse and more prolonged.
- After handling the sex organs, wash your hands thoroughly with soap and water so that the germs will not be spread to other people, including children. You may also carry the disease to your eyes. Be extremely careful about soiled towels. Do not allow others to use your irrigation syringe or douche nozzle. You should not use that belonging to another person. Infection may spread.
- When the testicle is swollen, all treatment should be stopped. See your doctor at once.
- Douches, unless properly taken, may spread infection to the fallopian tubes. They should only be used when ordered by a doctor.

What is the present attitude on sulfanilamide and fever therapy for gonorrhea?

Within recent months several new methods of treatment for gonorrhea have produced promising results.

In many instances the drug sulfanilamide has given excellent results. In other cases it has been of little value. In its action sulfanilamide seems to help the

body in its task of wiping out the gonococcus. It seems to prevent normal growth of the germ until the body has time to build up the necessary resistance to effect a cure. Sulfanilamide appears to have best results when the patient goes to bed for complete rest during the treatment. Unless properly given under the careful supervision of the physician, sulfanilamide may be very dangerous. It may cause considerable damage to the blood and blood-making organs, from which some patients have not recovered. Do not attempt self-treatment.

Fever treatment also has been useful especially in certain complications of gonorrhea such as infection of the fallopian tubes and in arthritis. Fever treatment, which raises the body temperature to a high degree, must be used under the constant and strict care of a well-trained physician.

Unfortunately, quack doctors and medical racketeers have taken advantage of the publicity on fever treatment and sulfanilamide. Do not be fooled by promises of quacks. Play safe. The instructions of your physician should be followed carefully and completely.

16 When is the patient well?

A patient is cured of the disease when the last gonococcus has disappeared from his tissues. This stage is preceded usually by a more or less prolonged period of apparent cure. All the symptoms of the disease disappear before cure has really taken place.

So long as a single gonococcus is present the disease can be transmitted to another individual. Hence, the There are no short cut tests for gonorrhea. The only sure diagnosis is the culture test.

Though fever therapy has proved effective in certain complications of gonorrhea, it must be used under constant and strict care of a qualified physician.



necessity for thorough and careful medical study before cure can be assumed and others exposed to possible infection.

Here, too, is another reason to avoid over-the-counter and self-treatment for gonorrhea. In either case the patient is left as sole judge of progress and cure. He is too prone to consider himself cured when, from a social point of view, he is a menace to public health.

17 What about complications?

Involvement of the seminal vesicles, the epididymis, the joints, heart, or any kind of abscess formation is called a complication.

Fortunately, most of these complications are easily prevented if the patient gets to a physician early and strictly adheres to the instructions given him. This permits the disease to be brought under control and cure is effected with little danger and without a great deal of physical discomfort.

In women the most formidable and frequently the most wrecking complication is abscess of the fallopian tube. It causes long periods of invalidism. There is much immediate danger from additional infection such as peritonitis. Pain is extreme in the lower abdominal region. Usually such complication results in the permanent closing of the tube. If it occurs on both sides permanent sterility usually results. It is this too common experience that makes gonorrhea such a tragic and serious disease for women.

If an uncured woman does become pregnant she should be treated carefully to avoid serious complications. Good treatment can prevent infection of her child's eyes at birth.

Does one attack of gonorrhea prevent future ones?

There is no such thing as immunity against gonorrhea. A patient may have any number of attacks of gonorrhea. The new infection will have a similar incubation period and similar symptoms to any previous infection. Usually it will be decidedly active.

Since gonorrhea may be acquired repeatedly, it is often a cause of poor health and economic loss.

19 Is gonorrhea a public health problem?

Any disease with which two million people in this country are constantly infected is a public health problem. Gonorrhea as a frequent cause of sterility both in men and women, as a cause of severe arthritis and heart disorders, and as a cause of considerable blindness, is especially a problem for public concern. The economic cost of days lost from work and treatment costs cannot be estimated, but they run into millions of dollars each year.

Gonorrhea presents difficult problems of control. For one thing, anything like "standard" methods of treatment—such as we have for syphilis—have not

been developed for gonorrhea. New drugs discovered in recent years, however, hold promise of new developments. Clinical reports at present, for instance, indicate that more than 85 percent of all gonorrhea cases which are hospitalized and treated with the new drug sulfanilamide are cured. But it is important to note: These were hospitalized cases, under the watchful eyes of doctors and nurses all day and night. At the present time so little is known about these drugs that their use by untrained persons is very dangerous. The only safe course in treating gonorrhea is to let a competent doctor do the job.

A second major item which has made control of gonorrhea difficult is that, unlike syphilis, which can be made noninfectious within a short time after treatment begins, there is no way in which gonorrhea can be made noninfectious except by cure.

Even with these drawbacks, gonorrhea can be controlled if the physicians and citizens of each community decide that the knowledge and experience of modern science must be brought to bear on the problem of venereal disease control.

20 How can your town control gonorrhea?

Since gonorrhea is an important public health problem control measures should be undertaken by local public health departments, just as is done with typhoid or smallpox. The following six points form the essential framework for active and efficient public health control of gonorrhea:

- Each State and city health department should have a special division devoted to control of gonorrhea and syphilis, under supervision of a trained, full-time public health officer.
- An efficient and workable system of case reporting should be set up in sufficient detail so that the health officer may learn the extent and trend of the problem with which he is dealing.
- Approved and practical diagnostic laboratory services should be available without charge to all physicians treating gonorrhea.
- Adequate treatment should be available to everybody despite possible inability to pay. Drugs for treatment should be provided to all clinics and physicians without charge by the State.
- Cure is the only means available to the health officer for preventing spread of gonorrhea. There should be provided sufficient follow-up workers to locate and return to treatment patients lapsing from treatment before they are pronounced cured.
- Every public health program depends for success upon trained physicians and an enlightened public.
 Provision should be made in each locality for developing an informational program—both for the medical profession and for the public.

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